



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,464	12/20/2005	Johannis Friso Rendert Blacquiere	NL 030754	8220
24737 7590 02/13/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER DUDEK JR, EDWARD J	
			ART UNIT 2186	PAPER NUMBER
			MAIL DATE 02/13/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,464

Applicant(s)

BLACQUIERE ET AL.

Examiner

Edward J. Dudek

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/15/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to application #10/561464 filed on 20 December 2005.

Claims 1-11 are pending and have been presented for examination.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 78. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: page 11, lines 25-34 discuss the various configurations of user data and spare areas. This

Art Unit: 2186

section identifies a first storage section (58) as having a contiguous layout for streaming data, which corresponds correctly to figure 6. This section further describes another storage section (59) as having a contiguous layout for non-streaming information. This does not coincide with figure 6. It is suggested this section be identified as having a distributed layout (page 11, line 31), as this will coincide with figure 6 and the invention as a whole.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 1 and 10, the phrase "like" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 2-9 and 11 are also defective as they depend from claims 1 and 10 respectively.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The limitation of computer program product can be

reasonable interpreted to be software, per se. Software *per se* is merely function descriptive material, and is non-statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims (**U.S. Patent #7,058,852**) in view of Gotoh (**U.S. Patent #6,314,235**).

As per claim 1: Sims discloses a device for recording information in blocks having logical addresses on a record carrier, which device comprises recording means (22) for recording marks in a track on the record carrier representing the information (**see figure 3, element 351**), and control means (20) for controlling the recording by locating each block at a physical address in the track (**see figure 3, element 350 and column 17 line 62 thru column 18 line 13**), the control means comprising addressing means (31) for translating the logical addresses into the physical addresses and vice versa in dependence of defect management information (**see column 17 line 62 thru column 18 line 13**), defect management means (32) for detecting defects and maintaining the defect management information (**see column 9, lines 7-12**), the defect management information including assignment information indicative of assignment of

Art Unit: 2186

physical addresses in first parts of the track to at least one user data area, assignment of physical addresses in second parts of the track to defect management areas and assignment of the defect management information to the defect management areas **(see column 13, lines 47-62)**, and the defect management information including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area **(see column 11, lines 28-33)**, and defect management area reassignment means (34) for changing said assignment information in dependence of the data type **(see column 10 line 58 thru column 11 line 28)**. Sims does not disclose data type detection means (33) for detecting a data type of recorded information, in particular the type being streaming for real-time data like digitally encoded video, or non-streaming for random data like computer data files. Gotoh discloses a system that is capable of determining the type of data that is being recorded, and determining if the data is AV data or computer data **(see column 9, lines 1-16)**. Depending on the type of data being stored on the storage medium, the way the defective blocks are allocated are changed so that the performance requirements for real-time or streaming data can be satisfied **(see column 2, lines 1-16)**. The system disclosed by Sims enables user to set the type of data being stored on the medium. It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have modified the system disclosed by Sims, by adding the functionality of having the device detect the type of data being stored on the storage medium, since the type of data stored will determine the performance required, as taught by Gotoh.

As per claim 2: wherein the defect management area reassignment means (34) are for changing said assignment information from a distributed layout having the first parts and the second parts of the track alternatingly arranged to a contiguous layout having a substantially uninterrupted user data area in dependence of the data type being streaming, or vice versa **(see column 10 line 58 thru column 11 line 28)**.

As per claim 3: wherein the defect management area reassignment means (34) are for changing said assignment information for a first physical address range to the distributed layout and for a second physical address range to the contiguous layout, the first physical address range containing information of the non-streaming type and the second physical address range containing information of the streaming type **(see column 10 line 58 thru column 11 line 28 and column 12, lines 30-37)**.

As per claim 4: wherein the defect management area reassignment means (34) are for assigning a defect to a first defect management area for information of the streaming type, or to a second defect management area for information of the non-streaming type **(see column 10 line 58 thru column 11 line 28, since each area that is defined has a user area and a spare area, it is inherent that the defect is remapped to that spare area that is associated with the user data area)**.

As per claim 7: wherein the defect management area reassignment means (34) are changing the assigning of physical address to the first defect management area for information of the streaming type, or to the second defect management area for information of the non-streaming type in dependence of information recorded or defects detected on the record carrier **(see column 10 line 58 thru column 11 line 28, since**

each area that is defined has a user area and a spare area, it is inherent that the defect is remapped to that spare area that is associated with the user data area).

As per claim 9: wherein the data type detection means (33) are for detecting the data type by monitoring commands for recording or retrieving information, by retrieving record carrier information indicative of the data type, by detecting a data type from the data structure of the recorded information, or by detecting file system information, or by communicating with a host device **(see Gotoh column 9, lines 1-16).**

As per claims 10 and 11: Sims discloses a method of defect management for recording of information in blocks having logical addresses on a record carrier by locating each block at a physical address in the track **(see column 7, lines 30-35)**, translating the logical addresses into the physical addresses and vice versa in dependence of defect management information **(see column 17 line 62 thru column 18 line 13)**, detecting defects and maintaining the defect management information **(see column 9, lines 7-12)**, the defect management information including assignment information indicative of assignment of physical addresses in first parts of the track to at least one user data area, assignment of physical addresses in second parts of the track to defect management areas and assignment of the defect management information to the defect management areas **(see column 13, lines 47-62)**, and the defect management information including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate

Art Unit: 2186

physical address in a defect management area (**see column 11, lines 28-33**), the method comprising changing said assignment information in dependence of the data type (**see column 10 line 58 thru column 11 line 28**). Sims does not disclose data type detection means (33) for detecting a data type of recorded information, in particular the type being streaming for real-time data like digitally encoded video, or non-streaming for random data like computer data files. Gotoh discloses a system that is capable of determining the type of data that is being recorded, and determining if the data is AV data or computer data (**see column 9, lines 1-16**). Depending on the type of data being stored on the storage medium, the way the defective blocks are allocated are changed so that the performance requirements for real-time or streaming data can be satisfied (**see column 2, lines 1-16**). The system disclosed by Sims enables user to set the type of data being stored on the medium. It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have modified the system disclosed by Sims, by adding the functionality of having the device detect the type of data being stored on the storage medium, since the type of data stored will determine the performance required, as taught by Gotoh.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sims (**U.S. Patent #7,058,852**) and Gotoh (**U.S. Patent #6,314,235**) as applied to claims 1-4, 7, and 9-11 above, and further in view of Gotoh (**U.S. Patent Application Publication #2003/0191980**).

As per claim 8: the combination of Sims and Gotoh disclose all the limitations of claim 1 as discussed above. The combination fails to disclose the defect management area reassignment means (34) are for, in the event that the translation of logical address to physical address of previously recorded blocks is affected by said reassignment, moving the previously recorded blocks to a different physical address that after the reassignment corresponds to the logical address, and/or by adapting file management information by amending the logical addresses of the affected of previously recoded blocks. Gotoh discloses defect management whereby another spare area for remapping defective blocks is needed (**see [0215]**). The system determines if there is currently data stored in the area where the new spare area is going to be located, and if so the data is moved to another area of the disk so that the data is not lost and the spare area can be allocated in the most beneficial spot (**see [0219]-[0220]**). It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have moved previously recorded blocks in the area where the new spare area is going to be located to another area on the medium, in the system disclosed by Sims and Gotoh, to allow the spare area to be located in the most beneficial area, as taught by Gotoh.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Dudek whose telephone number is 571-270-


1030. The examiner can normally be reached on Mon thru Thur 7:30-5:00pm Sec. Fri 7:30-4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. J. D./
Examiner, Art Unit 2186

February 7, 2008



MATTHEW KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100